Applicant	:	Hugh G. Loebner Crown Industries, Inc. 155 North Park St. East Orange, NJ 07017
Appl. No.	:	09/684,658
Filed	:	Oct. 10, 2000
Title	:	Weighted Pulley System Crowd Control Stanchion
Grp/A.U.	:	3629
Examiner	:	Ernesto Garcia
Date	:	October 17, 2002

APPEAL BRIEF

1. Real Party in Interest: Applicant/Inventor, Hugh Gene Loebner
2. Related Appeals and Interferences: None.
3. Status of Claims:

   Claim 1. Rejected - Appealed

   Claim 2. Withdrawn

   Claim 3. Withdrawn

   Claim 4. Withdrawn

   Claim 5. Rejected – Appealed

   Claim 6. Rejected – Appealed

   Claim 7. Rejected – Appealed

4. Status of Amendments: There are no amendments subsequent to the final rejection.
5. Summary of invention: This invention relates to portable posts used to direct pedestrian traffic. Specifically, it relates to portable posts that use a retractable belt or tape.

   The present invention uses a gravity powered pulley system to retract the tape rather than using springs to power the retraction of the tape. Figure 1 shows an overview of the invention. Figure 2 shows the pulley mechanism and tape, while Figure 3 shows how the pulley mechanism is contained disposed relative to an enclosing post.

   Further, the invention shows how the speed of retraction can be reduced by pneumatic braking by making the weighted descending pulley act as a piston within a sealed cylinder.

At page 2, lines 29-31 the application states: "When the guidance tape is extended from the stanchion the bottom block assembly rises. When the directional guidance tape is retracted the bottom block assembly drops within the post."
At page 3, lines 7-9 the application states: ".... (4) the bottom block assembly with membrane act as a piston, providing simple and efficient pneumatic braking when the guidance tape is being retracted C. At page 3, lines 34-37, when describing means to attach the post to a base, the application states: "The specific method of attachment is not important except that the base should provide a relatively air tight seal at the bottom of the post so that pneumatic braking may be used to slow the descent rate of the bottom block, and hence the tape retraction speed."
At page 4, lines 34-37 through Page 5, lines 1-2, the application states: "Attached to the bottom is a circular membrane to provide a seal between the bottom block assembly and the interior wall of the tube. The membrane slows the escape of air from the space between the bottom of the block assembly and the bottom of the tube when the block assembly descends, thus slowing the rate of descent of the bottom block assembly."

6. Issues: The examiner rejects Claim 1, which claims an extendible guidance tape system which uses a weighted pulley having multiple rollers as unpatentable under 35 USC § 103 over European patent EP-375,580 in view of Gompertz, et. al., 6,349,503. The examiner rejects Claims 5 – 7, which claim pneumatic braking, as unpatentable under 35 USC § 112.

7. Grouping of Claims.
Claim 1 stands alone.
Claims 6 depends on Claim 5. If Claim 5 is disallowed, Claim 6 fails too.
Claim 7 stands alone.

8. Arguments.
Rejection of claims 5-7 under 35 USC 112
The examiner rejects claims 5-7 for the reasons they contained matter which was:

> ".... not described in specification in such a way as to reasonably convey to one skilled in the relevant art that [I], at the time the application was filed, had possession of the claimed invention. The specification does not describe 'means to brake [the] [*sic*] retraction of said guidance tape by piston means' Nowhere in the specification does this clause or terms appear and the drawings do not show the means for braking [the] [*sic*] retraction."

Furthermore, the examiner rejects the claims ".... as being indefinite for failing to point out and distinctly claim the subject matter which the applicant regards as the invention."

I respectfully disagree with the examiner's conclusions, and appeal these rejections on the following grounds.

There seem to be several components to the examiner's rejection. One is that I did not "possess" the concept of a piston (or how one could be used to slow the retraction of the guidance tape). A second is that the specification is somehow inadequate to support the claims and a third is that the claims do not point out what I am claiming.

I will address each point in turn.

First, I will address the question of whether I "possessed" the idea of a piston and how it could be used to slow the descent of a weighted pulley. It is true that, at the time of the application, I did not claim the subject matter of claims 5-7, but I certainly understood at the time of the application how the retraction of a guidance tape could be slowed by devising the weight into a piston and I explicitly described in the specification how this could be accomplished.

I will frankly admit that I do not understand why the validity of my application or its claims should hinge upon whether some putative worker skilled in the art has the psychic ability to allow him or her to understand my cognitive state. I can understand why enablement, novelty, statutory appropriateness of subject matter and lack of "obviousness" are relevant, but I do not see why someone has to be able to read my mind.

Nevertheless, I state that I have "possessed" the idea of pistons since I was a child. The concept of a piston is not particularly deep. The *MacMillan Dictionary for Children,* Robert Costello, Editor in Chief, 4th Revised Edition, 2001, defines a piston as: "A cylinder that fits closely inside a tube or hollow cylinder, where it moves back and forth...." p. 566 This dictionary is advertised as being suitable for children ages 8 -12.

As for myself, I first became acquainted with the concept at a somewhat earlier age when my father gave me a stationary electric steam engine. I was, I think, about 6 or 7 years of age. I can still remember the smell of the steam mixed with 3-in-1 oil and the "chug-chug-chug" sound that it made. It even had a whistle. My father explained to me in simple terms how the steam pushed a piston to make a rod drive a flywheel. Later, when I was perhaps 9 or 10 years of age, I learned how a sliding valve is used to direct steam alternately to the front and rear of the piston, causing it to move first in one direction, then another. It was about the same time that I learned the details of the 4 cycle gasoline engine, and how a piston first drew fuel and air into a cylinder, then compressed the mixture, then was driven by the power stroke, and finally exhausted the fuel.

I am not being sarcastic, nor would I trouble the Board with this brief biographical excursion into my childhood exposure to pistons, except that I am apparently required to demonstrate that I "possessed" the concept of what a piston is. I hope that my statements will convince the honorable members of the Board that I have known what pistons are, and how they work, since early childhood. At the time of the present application I was 58 years old, a former Physics major at the Johns Hopkins University, and the holder of a Ph.D. in Demography, Research Methods in Social Research, and Mathematical Sociology from The University of Massachusetts. Finally, I will attest that at the time of the application I had actually reduced the invention to practice. That is, I had made and tested a pulley retraction system which used a membrane attached to the bottom weight to slow its descent within a sealed tube.

I hope that I have convinced the honorable members of the Board that I really do understand what a piston is, how it works, and how a weight descending in a sealed tube can be fashioned into a piston to retard the descent of the weight by pneumatic means.

The fact that I "possessed" the invention (i.e. that a weighted pulley can be designed to be a piston in a sealed tube so that the weight's descent may be slowed) does not *ipso facto* mean that the specification was enabling. However, I believe that my specification was, in fact, enabling, for the following reasons.

A. At page 2, lines 29-31 the application states: "When the guidance tape is extended from the stanchion the bottom block assembly rises. When the directional

guidance tape is retracted the bottom block assembly drops within the post." I assert that this clearly and distinctly describes that the bottom assembly moves up and down within the post.

B. At page 3, lines 7-9 the application states: ".... (4) the bottom block assembly with membrane act as a piston, providing simple and efficient pneumatic braking when the guidance tape is being retracted ...." I assert that this clearly, distinctly and *explicitly* describes the bottom assembly as a piston and that the piston/block assembly will be slowed by pneumatic braking.

C. At page 3, lines 34-37, when describing means to attach the post to a base, the application states: "The specific method of attachment is not important except that the base should provide a relatively air tight seal at the bottom of the post so that pneumatic braking may be used to slow the descent rate of the bottom block, and hence the tape retraction speed." I assert that this clearly and distinctly describes the post as a sealed cylinder.

D. At page 4, lines 34-37 through Page 5, lines 1-2, continuing a discussion of the bottom block assembly, the application states: "Attached to the bottom is a circular membrane to provide a seal between the bottom block assembly and the interior wall of the tube. The membrane slows the escape of air from the space between the bottom of the block assembly and the bottom of the tube when the block assembly descends, thus slowing the rate of descent of the bottom block assembly. The art of pistons and sealing pistons is well understood. I have found that a 2 inch diameter disk of tempo nylon velour material serves to slow the descent of the bottom block assembly" I assert that the this clearly and distinctly describes the particular mechanism (i.e. pneumatic braking) by which the bottom assembly's descent is slowed, and at least one suitable sealing membrane.

The examiner's response to Claims 5-7 was his first response to these claims, and yet it was a final rejection. Had the examiner's rejection not been final, my response to him would have been to ask him: "What is lacking in the application's specification? What more could I possibly have included?"

Since the examiner's response was a final rejection, thus preventing me from asking him those questions, I respectfully ask the honorable members of the Board the same questions that I was unable to ask of the examiner: "What is lacking in the application's specification? What more could I possibly have included?"

Let me now address the third basis for the rejecting Claims 5-7, ".... as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." Had the examiner not finally rejected these claims, perhaps I could have, with his consultation, devised alternate wordings for these claims that would have satisfied his objections. Nevertheless, I assert that these claims as worded are proper.

The examiner states that "Regarding claims 5 and 7, recite [*sic*] the limitation 'piston means' in lines 4 and 7, respectively. It is unclear what this piston means comprises. The disclosure does not indicate what exactly is the piston means." I respectfully disagree with this statement. As I have already pointed out, the specification at page 3, lines 7-9 *explicitly* states that the bottom weight with membrane act as a piston, and at page 4, lines 34-37 states that the slow escape of air will cause the piston to descend slowly. What more could I have said?

The examiner states "Claim 5 recites the limitation 'the retraction' in line 4. There is insufficient antecedent basis for this limitation in the claim." He makes the same objection to Claim 7. I respectfully disagree with this statement. The entire application concerns a retractable tape stanchion.

The Merriam Webster Dictionary Online defines the term "retraction" as:

> Main Entry: **re·trac·tion**
> Pronunciation: `ri-'trak-sh&n`
> Function: *noun*
> Date: 14th century
> **1 :** an act of recanting; *specifically* **:** a statement made by one retracting
> **2 :** an act of retracting **:** the state of being retracted
> **3 :** the ability to retract
> (http://www.m-w.com/cgi-bin/mwaolad?va=retraction&book=Dictionary)

Now consider the following parts of my specification [italics added]. At p.2, line 7 the specification states ".... means *to retract* (cf. def 3) an extended guidance tape...,"

at p.2, lines 30-31 the specification states "When the directional guidance tape is *retracted* (cf. def 2) ...," at p.3, line 2 the specification state "This permits pneumatic braking when the guidance tape *is being retracted* (cf. def 2) ..." and at p.3, lines 8-9 "....when the guidance tape *is being retracted* (cf. def 2) ...." Surely any worker skilled in the art and the English language would understand that the term "*the retraction*" is simply a part of speech based upon the verb "*to retract*" which is used copiously (and correctly) within the specification. Also, I reiterate my previous comment that had the examiner's rejection not been final I might have been able to devise another wording, one which the examiner might consider more appropriate or felicitous.

The examiner objects in Claim 6 to the limitation "said weight means." Had I been given the chance I would have been willing to replace "said weight means" with "said gravity means" which is used in Claim 5.

The examiner rejects Claim 1 as unpatentable over European patent EP-375,580 in view of Gompertz, et. al., 6,349,503. I respectfully disagree. Although Gompertz, et. al., teach a block assembly comprising multiple rollers, this assembly is specifically directed toward a fluid powered system in which the motive power is a piston. Nowhere do Gompertz, et. al., suggest that their system will work with other types of systems, and specifically those using gravity means. The courts have held that "A reference is not available under 35 U.S.C. § 103 if it is not within the field of the inventor's endeavor and was not directly pertinent to the particular problem with which the inventor was involved." King Instrument Corp .v. Otari Corp., 767 F 2d 853 226 U.S.P.Q 402 (Fed. Cir. 1985) cited in Aisenberg Patent Law Precedent, p. 484.

Gompertz, et. al.'s patent relates to "A flexible barrier system ... that can be raised or lowered *from a remote location* using an accompanying remote control device...." (from the abstract of US Patent 6,349,503 B1, italics added), and "....specifically ... to the field of gates and mechanical barriers which are opened and closed by electric motors, compressed fluids or gases." (Col 1., Lines 6 – 7). On the other hand, the specific object of my invention is for a barrier system that is uses gravity means to retract a tape that has been manually pulled out.

I respectfully disagree with the examiner's assertion that "as taught by Gompertz et. al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to comprise the block assembly of more than one roller to quadruple the length of the tape." Not only is it unlikely that any ordinary worker skilled in the art who was interested in gravity powered retractable tape stanchions to examine fluid powered barrier systems, but even if he or she did examine Gompertz et. al.'s invention, I assert that his or her reaction would be to consider the glaring flaw in Figure 4 of the invention. This flaw is the illogical position of the piston, 20. Any worker skilled in the art would understand that the piston, 20, is vertically disposed at the bottom of support member 16. As a result of this vertical disposition at the bottom of the support member 16 the range of travel of block assembly 52 is seriously reduced. Since the purpose of using multiple rollers was to extend the range of extension of the flexible barrier, the vertical position of the piston directly interferes with that objective.

The problem with the position of the piston is to me so patent that my immediate reaction (as I think it would be of any ordinary worker skilled in the art) is to try to devise alternative configurations for the piston rather than to consider the multiple rollers. Could the piston be horizontal, for example? Perhaps one should discard the piston entirely and use a stepper motor as the motive means. If one uses a stepper motor, then need it drive a flexible chain, or is there an alternative? In fact for me, the logical conclusion is to use a stepper motor with an attached rigid arm, similar to a semaphore. This, is, in fact, the universally used means for remotely controlling traffic through a lane for the good reason of its simplicity.